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LOCUS 181465
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ACCESSION 181465
VERSION 181465.1 GI:3209762
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SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 2994)
AUTHOR Shepard,H,Michael and Wen,S,Ren.
TITLE Characterization of a novel anti-p110.sup.RB monoclonal antibody
JOURNAL Patent: US 5710255-A 2 20-JAN-1998;
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 REFERENCE 1 (sites)
 AUTHORS Mcees,T.L., Yandell,D.W. and Dryja,T.P.
 TITLE Structure and partial genomic sequence of the human retinoblastoma

Tue Feb 15 15:38:57 2000

us-09-026-459a-34_copy_7_2502.oli.rge

Page 1

GenCore version 4.5
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ALIGNMENTS

RESULT 1
LOCUS I05311
DEFINITION Sequence 1 from Patent EP 0259031.
ACCESSION I05311
VERSION I05311.1 GI:591083
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 4597)
AUTHORS Dryja,T.P. and Friend,S.
PAT 02-DEC-1994

TITLE Human DNA in the diagnosis of retinoblastoma
JOURNAL Patent: EP 0259031-A2 1 09-MAR-1988:
FEATURES Location/Qualifiers
source 1..4597

BASE COUNT 1489 a 842 c 812 g 1454 t
ORIGIN

Query Match 99.9%: Score 2493; DB 5; Length 4597;

Best Local Similarity 100.0%: Freq. No. 0;

Matches 2493: Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 2
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DEFINITION Sequence 2 from patent US 5710255.
ACCESSION 181465
VERSION 181465.1 GI:3209762
KEYWORDS
SOURCE Unknown.
ORIGIN Unknown.
REFERENCE 1 (bases 1 to 2994)
AUTHORS Shepard,H.Michael and Wen,S.Fen.
TITLE Characterization of a novel anti-p110.sup.RB monoclonal antibody
JOURNAL Patent: US 5710255-A 2 20-JAN-1998;
FEATURES
Location/Qualifiers
1..2994
BASE COUNT 974 a 618 c 593 g 809 t
ORIGIN

Query Match 99.98; Score 2493; DB 5; Length 2994;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2493; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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GenCore version 4.5
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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41	122	4.8	589	5	109385	109385 Sequence 18
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45	119	4.7	323	10	HOMR18D18	L49221 Homo sapien

ALIGNMENTS

RESULT 1
LOCUS 105311 4597 bp
ACCESSION 105311
VERSION 105311.1 GI:591083
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 4597)
AUTHORS Dryja, T.P. and Friend, S.
PAT 02-DEC-1994

TITLE Human DNA in the diagnosis of retinoblastoma
JOURNAL Patent: EP 0259031-A2 1 09-MAR-1988;
FEATURES Location/Qualifiers
Source 1..4597
BASE COUNT 1489 a 842 c 812 g 1454 t
ORIGIN

Query Match 99.9%; Score 2551; DB 5; Length 4597;
Best Local Similarity 100.0%; Pred.No. 0;
Matches 2551; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 1314 TGTGCAAAATGGATCAAGAGATACAAACTGAGTGCCTGATTAACAGATTAATGGA 1373
OY 1143 ATCCATGCTTAAATCAAGAAAGAAAGATTAATCCAAATTTTGAACACTTCTGAA 1202
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DB 1374 ATCCATGCTTAAATCAAGAAAGAAAGATTAATCCAAATTTTGAACACTTCTGAA 1433
OY 1203 TGACAAATTTTCAATGCTTTATGCGCTGCGCTCTGAAGTGTAAATGGCACATA 1262
    |||
DB 1434 TGACAAATTTTCAATGCTTTATGCGCTGCGCTCTGAAGTGTAAATGGCACATA 1493
OY 1263 TAGCAAGATGATCTGAGAAATCTGATCTGGAACAGATTTGCTTCCATGATGCT 1322
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DB 1494 TAGCAAGATGATCTGAGAAATCTGATCTGGAACAGATTTGCTTCCATGATGCT 1553
OY 1323 GATGCTGCTTAAATTAAGCTTTGATTTTACAAAGTATGCAAGTTTATCCAAAG 1382
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DB 1554 GATGCTGCTTAAATTAAGCTTTGATTTTACAAAGTATGCAAGTTTATCCAAAG 1613
OY 1383 AGAAGCAACTGTCAGAAAGAAATGATTAACATTTAAGCATGTGATGATCAT 1442
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DB 1614 AGAAGCAACTGTCAGAAAGAAATGATTAACATTTAAGCATGTGATGATCAT 1673
OY 1443 GGAATCCCTGATGCTGCTCAAGATTCACCTTATGATCTTTTAAACATCAAGGA 1502
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DB 1674 GGAATCCCTGATGCTGCTCAAGATTCACCTTATGATCTTTTAAACATCAAGGA 1733
OY 1503 CCGAAGAGCAACTGATACCTTGAATCTGCTGCTCTTATCTCTCCAGAA 1562
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DB 1734 CCGAAGAGCAACTGATACCTTGAATCTGCTGCTCTTATCTCTCCAGAA 1793
OY 1563 TATCACAAGTCAAGATATGATCTTCTCTGTAAGATCTCCAAAGAAAGGTTT 1622
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DB 1794 TATCACAAGTCAAGATATGATCTTCTCTGTAAGATCTCCAAAGAAAGGTTT 1853
OY 1623 AACTACGGGTGAATTTCTACTGCAAAATGCAAGACAAAGCAAGCTCAGCTTCAGAC 1682
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DB 1854 AACTACGGGTGAATTTCTACTGCAAAATGCAAGACAAAGCAAGCTCAGCTTCAGAC 1913
OY 1683 CCGAAGCACTGAAATCTACTCTCTTCACTGTTTAAAGAAAGTATGCGCTAGC 1742
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DB 1914 CCGAAGCACTGAAATCTACTCTCTTCACTGTTTAAAGAAAGTATGCGCTAGC 1973
OY 1743 CTATCTCGGCTAAATCTACTCTTGTGAAGCCTTGTGTCGACCAAGATTAAGAA 1802
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DB 1974 CTATCTCGGCTAAATCTACTCTTGTGAAGCCTTGTGTCGACCAAGATTAAGAA 2033
OY 1803 TATCATCTGAGACCTTTTCCAGACACCTGCGAAGTATGATGATCTGATGAGACAG 1862
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OY 1863 GCATTTGAGCAAAATTAATGATGCTTCATGATGATGATGCAAGATGAAGATTAAG 1922
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OY 1923 CCTTAATTTCAAAATCATGATTAACAGATTAACAGATTAACAGATTAACAGATTAAC 1982
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 Db 2274 GGTCTTCATGAGAGAGATGAGAGAGATTTTTCAGATGCTTCACAGAGAGAGAGAGAG 2233
 QY 2103 CTTCGACCAATACCTACATTCCTCGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2162
 Db 2334 CTTCGACCAATACCTACATTCCTCGAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2293
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 DEFINITION Sequence 2 from patent US 5710255.
 ACCESSION 181465
 VERSION 181465.1 GI:3209762
 KEYWORDS
 SOURCE
 ORGANISM
 UNKNOWN.
 UNCLASSIFIED.
 REFERENCE
 1 (bases 1 to 2994)
 AUTHORS Shepard,H,Michael and Wen,S,Fen.
 TITLE Characterization of a novel anti-p110.sup.BB monoclonal antibody
 JOURNAL Patent: US 5710255-A 2 20-JAN-1998;
 FEATURES
 location/Qualifiers
 1..2994
 source
 BASE COUNT 974 a 618 c 593 g 809 t
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 Query Match 99.9%; Score 2551; DB 5: Length 2994;
 Best Local Similarity 100.0%; Pired. No. 0;
 Matches 2551; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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LOCUS			
DEFINITION			
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VERSION			
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MEDLINE			
COMMENT			

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OK nucleic - nucleic search, using sw model

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Searched: 82193 seqs, -1518192014 residues

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Word size: 0

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50: gb_p13:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	2619	99.9	2894	5	181465	181465 Sequence 2
3	2619	99.9	4839	10	HUMRB1RNA	181870 Homo sapien
4	2619	99.9	4600	10	HUMRB1A	M33847 Human retin
5	2619	99.9	2994	10	HUMRB5A	M28819 Human retin
6	2619	99.9	4537	5	109369	109369 Sequence 1
7	2660	93.8	3232	5	118496	118496 Sequence 1
8	2460	93.8	3232	5	118497	118497 Sequence 2
9	2208	84.2	4740	10	HUMRB5	M15400 Human retin
10	1420	54.2	4580	5	A01444	A01444 H. sapiens D
11	338	12.9	426	11	AF043224	AF043224 Homo sapi
12	207	7.9	480	9	HUMRB579	M19701 Human mutat
13	198	7.6	693	5	109384	109384 Sequence 17
14	198	7.6	693	9	HUMRB515	M27858 Human retin
15	198	7.6	180388	9	HUMRB515	L11910 Human retin
16	196	7.5	340	10	HUMRB1501V	L49220 Homo sapien
17	167	6.4	555	10	HUMRB4MU2	L41904 Homo sapien
18	165	6.3	935	5	109389	109389 Sequence 22
19	165	6.3	935	9	HUMRB520	M27863 Human retin
20	165	6.3	420	10	HUMRB23EX	L41910 Homo sapien
21	163	6.2	252	10	HUMRB1771L	L49230 Homo sapien
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23	148	5.0	717	5	109387	109387 Sequence 20
24	148	5.0	717	9	HUMRB518	L51467 Human retin
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26	147	5.6	224	10	HUMRB1SD1L	L49225 Homo sapien
27	146	5.6	650	5	109386	109386 Sequence 19
28	146	5.6	650	9	HUMRB517	M27860 Human retin
29	145	5.5	609	5	109377	109377 Sequence 10
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32	144	5.5	1310	9	HUMRB522	M27865 Human retin
33	144	5.5	625	10	HUMRB1610K	L41912 Homo sapien
34	132	5.0	224	10	HUMRB1610K	L41923 Homo sapien
35	131	5.0	317	10	HUMRB17MU2	L41939 Homo sapien
36	125	4.8	350	10	HUMRB20MU2	L41996 Homo sapien
37	124	4.7	444	10	HUMRB4MU2	L41892 Homo sapien
38	124	4.7	483	10	HUMRB19MU2	L41906 Homo sapien
39	123	4.7	570	5	109373	109373 Sequence 6
40	123	4.7	570	9	HUMRB504	M27848 Human retin
41	122	4.7	589	5	109385	109385 Sequence 18
42	122	4.7	589	9	HUMRB516	M27859 Human retin
43	122	4.7	224	10	HUMRB1646F	L49224 Homo sapien
44	122	4.7	222	10	HUMRB16EX	L41905 Homo sapien
45	119	4.5	323	10	HUMRB1D18	L49221 Homo sapien

ALIGNMENTS

RESULT 1
LOCUS 105311 4597 bp
DEFINITION Sequence 1 from Patent EP 0259031.
ACCESSION 105311
VERSION 105311.1 GI:591083
KEYWORDS
SOURCE
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 4597)
AUTHORS Dryja, R.P. and Friend, S.

PAT 02-DEC-1994

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Page 2

TITLE	Human DNA in the diagnosis of retinoblastoma			
JOURNAL	Patent: EP 0259031-A2 1 09-MAR-1988.			
FEATURES	Location/Qualifiers			
SOURCE	1.4597			
	/organism="unknown"			
BASE COUNT	1489 a	842 c	812 g	1454 t
ORIGIN				

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Query Match      99.98; Score 2619; DB 5; Length 4597;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2619; Conservative 0; Mismatches 0; Indels 0; Gaps 0
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OY	64	TTAACTGGGAGAAAGTTTCACTCTGGGAGTATGGAGCTATATTCACAAAGAA	123
Db	226	TTAACTGGGAGAAAGTTTCACTCTGGGAGTATGGAGCTATATTCACAAAGAA	285
OY	124	AAAGAACTGTGGGAACTCTGATCTTTATTGCAGCAGTTGACTACATGAGATGCTTC	183
Db	286	AAAGAACTGTGGGAACTCTGATCTTTATTGAGCAGTGAAGTCAATGAGATGCTTC	345
OY	184	ACTTTTACTGAGCTACAGAAACATAGAAATCACTGTCATTAATCTTTAACTTACTA	243
Db	346	ACTTTTACTGAGCTACAGAAACATAGAAATCACTGTCATTAATCTTTAACTTACTA	405
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Db	406	AAAGAAATTAATACAGACAGTACCAAGTTGTAATGCTATGCAAGATGTTGAAAGATAT	465
OY	304	GATGATATGTTTCACTCTGACGAAATTTGAAAGACATGTAATTTATTTGACA	363
Db	466	GATGATATGTTTCACTCTGACGAAATTTGAAAGACATGTAATTTATTTGACA	525
OY	364	CAACCCAGAGTCCGATATCTACTGAAATTAATTTGATGTTGCTTAAAGTTCTGG	423
Db	526	CAACCCAGAGTCCGATATCTACTGAAATTAATTTGATGTTGCTTAAAGTTCTGG	585
OY	424	ATACATTTTTATATGCTAAAGGGGAAAGTATTCACAAATGGAAGATGCTGATTTCA	483
Db	586	ATACATTTTTATATGCTAAAGGGGAAAGTATTCACAAATGGAAGATGCTGATTTCA	645
OY	484	TTTTCAGTTAATGCTATGTCCTTGACATTTTTATTAACTCTCACCTCCACTTGTCTC	543
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Db	606	AAAGAACCATTAATAAACAGCTGTTATACCCATTAAATGGTTACCTCGAACCCAGCA	765
OY	604	GGTCAGAAACGAGATGACCGGATAGCAAAACAACAGTAAATATACAGAAATATTGAA	663
Db	766	GGTCAGAAACGAGATGACCGGATAGCAAAACAACAGTAAATATACAGAAATATTGAA	825
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OY	724	TTTAACTCTTTTGAAATCTCTGGAGCTGTAAATCTTAATGCAATTCGAGAGTTGAA	783
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Db	1006	TTTTTGGATATGATTAACCTCTCAAGCTATCTTATAGACAGTTTGAACACAGAGA	1065

Qy	504	ACACACAGAAAAAGTACCTTGATGAAGAGAGGATGAATTCCTCCACACACCTCCAGT	963
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Qy	1024	CCTTCAGAAAATCGATTTCTCTATTTTAACACAGCAGCAGTGAATCCAAAAGAAATGA	10875
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Qy	1204	GTAATGSAATTCAGTCTTAAATCGAAGAAGACATTATTCATTCAAAATTTTGGCAA	12635
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Qy	1264	CTTCGAAATGCAACAATTTTTCATATGTCTTTATGGCGCCCTCTTGAGTGTGAATG	13323
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Qy	1324	GCACATATATGCAAGAAATGACATCTCGAATCTTGATCTCGAACAATTTGTCTTTCCA	13835
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Qy	1504	CGAAATCATGSAATCCCTTGACATGGCTCTCGAATTCACCTTATTGATACCTATTAACAA	15635
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Qy	1564	TCAAAGACCGSAGSAGSAGACAACTGATCACTTTGAATCTGCTGTCTCTTAACTCTCT	16233
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Qy	1684	AAAGGTCTACACTACGCGGTGTAAATTTCTACTGCAAAATGACAGACACAGCAACTCAGCC	17433
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Db	1966	CGCGTAGCGTATCTCCGGTAAATAACACTTGTGAAAGCCTTGCTGTCGACACCCAGAA	20252
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Db	2026	TTAGAAACATATCATCTGSAACCTTTTCACAGACACCCGAGAGATGATATGAACATCAG	20838
Qy	1924	AAGACACGCAATTTGACCAAAATTAATGATGTCTTCATGATGACATATGCAAAAGTGAAG	19833
Db	2086	AAGACACGCAATTTGACCAAAATTAATGATGTCTTCATGATGACATATGCAAAAGTGAAG	21453
Qy	1984	AATATAGACCTTAATTCGAAATCATTTGTAACAGCATACAAGATCTTCTCATGCTGTT	20433

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Db	424	AAGGAACGTGGGGAATCTGATATTTTATTCGACAGTTGACCTAGATGAGATGCTTC	483
OY	184	ACTTTACAGACTACAGAAAAACATAGAATACAGTCCATAAATTTTAACTTACCTACCTA	243
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OY	484	TTTCAGTTATCTATGTCGTCTGAGTATTTTATTAACCTGCACCTCCCATGTTGGTC	543
Db	784	TTTCAGTTATCTATGTCGTCTGAGTATTTTATTAACCTGCACCTCCCATGTTGGTC	843
OY	544	AAGGAACCATATAAACAGCTGTTATATCCCATTAATGTTCTACCTCGAAGACCCAGGCA	603
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OY	604	GGTCACAAAGAGATGCGACGGATATGCAAAACATCTGAATATGATACAGATATTTGAA	663
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OY	724	TTTATACCTTTTAAATCTCTCTGCACTGTATACATCTAATGCACTCCAGAGGTTGAA	783
Db	1024	TTTATACCTTTTAAATCTCTCTGCACTGTATACATCTAATGCACTCCAGAGGTTGAA	1083
OY	784	AATCTTTCTTAACGATACGAGAAATTTATCTTAAAAATAAAGATCTAGATGCAACATTA	843
Db	1084	AATCTTTCTTAACGATACGAGAAATTTATCTTAAAAATAAAGATCTAGATGCAACATTA	1143
OY	844	TTTTTGGATCAGATTAACAACTTCAAGCTGATTCATAGACAGTTTTGAACACAGAGA	903
Db	1144	TTTTTGGATCAGATTAACAACTTCAAGCTGATTCATAGACAGTTTTGAACACAGAGA	1203
OY	904	ACACACAGAAAAAGTAACTGTAAGAAAGAGGTAAATGTTTCTCCACACACTCCAGTT	963
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OY	964	AGGACTGTTATGACATATCCAACTATATATGATGATTTTAAATTCAGACACTGTATCA	1023
Db	1264	AGGACTGTTATGACATATCCAACTATATATGATGATTTTAAATTCAGACACTGTATCA	1323

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RESULT 3
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 LOCUS Homo sapiens retinoblastoma susceptibility protein (RBI) mRNA and
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 ACCESSION L41870
 VERSION L41870.1 GI:793994
 KEYWORDS retinoblastoma protein; retinoblastoma susceptibility.
 SOURCE Homo sapiens
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
 Eutheria; Primates; Catarrhini; Homiidae; Homo.
 REFERENCE 1 (sites)
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 Gene 80 (1), 119-128 (1989)
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 polymorphism analysis and polymerase chain reaction sequencing
 Oncogene 7 (7), 1445-1451 (1992)
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 showing incomplete penetrance and mild expression of the
 retinoblastoma phenotype
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 Hogg, A., Bla, B., Onadim, Z. and Cowell, J.K.
 Molecular mechanisms of oncogenic mutations in tumors from patients
 with bilateral and unilateral retinoblastoma
 Proc. Natl. Acad. Sci. U.S.A. 90 (15), 7351-7355 (1993)
 JOURNAL MEDLINE
 REFERENCE 6 (sites)
 Kratzke, R.A., Otterson, G.A., Hogg, A., Coxon, A.B., Gerads, J.,
 Cowell, J.K. and Kaye, F.J.


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LOCUS 181465
DEFINITION Sequence 2 from patent US 5710255.
ACCESSION 181465
VERSION 181465.1 GI:3209762
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 2994)
AUTHORS Shepard,H.Michael and Wen,S.Fen.
TITLE Characterization of a novel anti-P110.sup.RB monoclonal antibody
JOURNLS Patent: US 5710255-A 2 20-JAN-1998;
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Location/Qualifiers
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ORIGIN

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 DEFINITION Homo sapiens retinoblastoma susceptibility protein (RBI) mRNA and mutations.
 ACCESSION L41870
 VERSION L41870.1 GI:793994
 KEYWORDS retinoblastoma protein; retinoblastoma susceptibility.
 SOURCE Homo sapiens cDNA to mRNA.
 ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.
 REFERENCE 1 (sites)
 AUTHORS McGee,T.L., Yandell,D.W. and Dryja,T.P.
 TITLE Structure and partial genomic sequence of the human retinoblastoma susceptibility gene
 JOURNAL Gene 80 (1), 119-128 (1989)
 MEDLINE 90006771
 REFERENCE 2 (sites)
 AUTHORS Hogg,A., Onadim,Z., Baird,P.N. and Cowell,J.K.
 TITLE Detection of heterozygous mutations in the RBI gene in retinoblastoma patients using single-strand conformation polymorphism analysis and polymerase chain reaction sequencing
 JOURNAL Oncogene 7 (7), 1445-1451 (1992)
 MEDLINE 92319557
 REFERENCE 3 (sites)
 AUTHORS Onadim,Z., Hogg,A., Baird,P.N. and Cowell,J.K.
 TITLE Oncogenic point mutations in exon 20 of the RBI gene in families showing incomplete penetrance and mild expression of the retinoblastoma phenotype
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (13), 6177-6181 (1992)
 MEDLINE 92335261
 REFERENCE 4 (sites)
 AUTHORS Onadim,Z., Hogg,A. and Cowell,J.K.
 TITLE Mechanisms of oncogenesis in patients with familial retinoblastoma
 JOURNAL Br. J. Cancer 68 (5), 958-964 (1993)
 MEDLINE 94031584
 REFERENCE 5 (sites)
 AUTHORS Hogg,A., Bla.B., Onadim,Z. and Cowell,J.K.

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seq_documentation_block: PRI 05-MAY-1995
 LOCUS HMNB1MRNA 4839 bp mRNA
 DEFINITION Homo sapiens retinoblastoma susceptibility protein (RB1) mRNA and mutations.
 ACCESSION L41870.1 GI:793994
 VERSION L41870.1 GI:793994
 KEYWORDS retinoblastoma protein; retinoblastoma susceptibility.
 SOURCE Homo sapiens
 ORGANISM Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Homo.

REFERENCE
 1 (sites)
 McGeer,T.C., Yandell,P.W. and Dryja,T.P.
 Structure and partial genomic sequence of the human retinoblastoma susceptibility gene
 JOURNAL Gene 80 (1), 119-128 (1989)
 MEDLINE 90066771
 REFERENCE
 2 (sites)
 Hogg,A., Onadim,Z., Baird,P.N. and Cowell,J.K.
 Detection of heterozygous mutations in the RB1 gene in retinoblastoma patients using single-strand conformation polymorphism analysis and polymerase chain reaction sequencing
 JOURNAL Oncogene 7 (7), 1445-1451 (1992)
 MEDLINE 92319557
 REFERENCE
 3 (sites)
 Onadim,Z., Hogg,A., Baird,P.N. and Cowell,J.K.
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 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 89 (13), 6177-6181 (1992)

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ACCESSION 181465
VERSION 181465.1 GI:3209762
KEYWORDS
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ORGANISM Unknown.
REFERENCE 1 (bases 1 to 2994)
AUTHORS Shepard,H,Michael and Wen,S,Fen.
TITLE Characterization of a novel anti-p110.sup.RB monoclonal antibody
JOURNAL Patent: US 5710255-A 2 20-JAN-1998.
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Quality: 850.00 Length: 850
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GenCore version 4.5
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OM nucleic - nucleic search, using sw model

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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11	207	8.8	480	9	H08B1MRA	M19701 Human mutat
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34	132	5.6	224	10	H08B1MRA	L49223 Homo sapien
35	131	5.6	317	10	H08B1MRA	L41999 Homo sapien
36	125	5.3	350	10	H08B1MRA	L41996 Homo sapien
37	124	5.3	483	10	H08B1MRA	L41906 Homo sapien
38	122	5.2	589	5	I09385	I09385 Sequence 18
39	122	5.2	589	9	H08B1MRA	M27859 Human retin
40	122	5.2	224	10	H08B1MRA	L49224 Homo sapien
41	122	5.2	322	10	H08B1MRA	L41905 Homo sapien
42	119	5.1	223	10	H08B1MRA	L49221 Homo sapien
43	117	5.0	584	5	I09382	I09382 Sequence 15
44	117	5.0	584	9	H08B1MRA	M27856 Human retin
45	116	5.0	202	10	H08B1MRA	L49222 Homo sapien

ALIGNMENTS

RESULT 1
LOCUS I05311
DEFINITION Sequence 1 from Patent EP 0259031.
ACCESSION I05311
VERSION I05311.1 GI:591083
KEYWORDS
SOURCE
ORGANISM
Unkown.
REFERENCE 1 (bases 1 to 4597)
AUTHORS Dryja,T.P. and Friend,S.
PAT 02-DEC-1994

Tue Feb 15 15:39:01 2000

us-09-026-459a-36_copy_7_2349.oli.rge

Page 2

TITLE	Human DNA in the diagnosis of retinoblastoma
JOURNAL	Patent: EP 0259031-A2 1 09-MAR-1988;
FEATURES	Location/Qualifiers

Source

1. .4597

BASE COUNT	1489 a	842 c	812 g	1454 t
ORIGIN				

Query Match	100.0%	Score 2343;	DB 5;	Length 4597;
Best Local Similarity	100.0%	Pred. No. 0;		
Matches 2343; Conservative	0;	Mismatches	0;	Indels 0; Gaps 0;

OY	1	ATATCAAGACTGTGTGAAGAAAGATGATGATTGTTGGACTCTTCACGAAATTTGGAAAGG	60
DB	442	ATATCAAGACTGTGTGAAGAAAGTATGATGATTGTTGGACTCTTCACGAAATTTGGAAAGG	501
OY	61	ACATGTGAACATAATATTATTTAGACAAACCACAGCTTGATATCTACTGAAATTAATCT	120
DB	502	ACATGTGAACATAATATTATTTAGACAAACCACAGCTTGATATCTACTGAAATTAATCT	561
OY	121	GCATTGGTCTTAAAGTTTCTTGGATCACATTTTATACGTAAGGGGAAGATTAACA	180
DB	562	GCATTGGTCTTAAAGTTTCTTGGATCACATTTTATACGTAAGGGGAAGATTAACA	621
OY	181	ATGAAGAGATGATCTGGTGTATTCATTTCACTAGTTAATGCTATGTGCTTCAGATATTTAT	240
DB	622	ATGAAGAGATGATCTGGTGTATTCATTTCACTAGTTAATGCTATGTGCTTCAGATATTTAT	681
OY	241	AAACCTCACCCCTCCATGTTGTCGAAAGAACATATTAACGTGTATACCATTAAT	300
DB	682	AAACCTCACCCCTCCATGTTGTCGAAAGAACATATTAACGTGTATACCATTAAT	741
OY	301	GTTTCACCTCGAACACCCAGCGAGTCAAAACAGAGTGCAGCGATAGCAAAACACTA	360
DB	742	GTTTCACCTCGAACACCCAGCGAGTCAAAACAGAGTGCAGCGATAGCAAAACACTA	801
OY	361	GAAATGATACAGAAATTAATGAAGTCTCTGTAAAGAACTGATATATATAGTAG	420
DB	802	GAAATGATACAGAAATTAATGAAGTCTCTGTAAAGAACTGATATATATAGTAG	861
OY	421	GTGAAAAATGTTTATTTTAAAAATTTTATTAACCTTTATGAAATTCCTCTGGACTGTACA	480
DB	862	GTGAAAAATGTTTATTTTAAAAATTTTATTAACCTTTATGAAATTCCTCTGGACTGTACA	921
OY	481	TCTAATGACTTCGAGAGTGGAAATCTTTTAAACGATACGAGAAATTTATCTTAA	540
DB	922	TCTAATGACTTCGAGAGTGGAAATCTTTTAAACGATACGAGAAATTTATCTTAA	981
OY	541	AATTAAGACTCTGATGCAAGATTTTGTGGATCATGATTAACATCTTCAGACTGATCT	600
DB	982	AATTAAGACTCTGATGCAAGATTTTGTGGATCATGATTAACATCTTCAGACTGATCT	1041
OY	601	ATAGACAGTTTGAACACAGAGAACACACGAAAAAGTAACCTTGATGAAGGTGAAT	660
DB	1042	ATAGACAGTTTGAACACAGAGAACACACGAAAAAGTAACCTTGATGAAGGTGAAT	1101
OY	661	GTAATTCCTCCACACACCTCAGTTAGACAGTTATGAACACTATCCAAACATTAATGATG	720
DB	1102	GTAATTCCTCCACACACCTCAGTTAGACAGTTATGAACACTATCCAAACATTAATGATG	1161
OY	721	ATTTTAATTCACGAAGATCAACCTTCAGAAATCTGATTTCCATTTTAAACAATGCG	780
DB	1162	ATTTTAATTCACGAAGATCAACCTTCAGAAATCTGATTTCCATTTTAAACAATGCG	1221
OY	781	ACAGTATATCCAAAAGAAGATATCTGAAAAGTGAAGATATAGATATCATCTTTAAA	840
DB	1222	ACAGTATATCCAAAAGAAGATATCTGAAAAGTGAAGATATAGATATCATCTTTAAA	1281
OY	841	GAGAAATTTGCTAAAGCTGTGGGACAGGTTGTGTGCAAAATTTGGATACAGCATACAA	900
DB	1286	GAGAAATTTGCTAAAGCTGTGGGACAGGTTGTGTGCAAAATTTGGATACAGCATACAA	1341

QY	901	CTTGAGTTCGCTGGTAAATCCAGAGTAAGCAATCCAGTCTAAATCAGAAAGACGCA	960
Db	1342	CTTGGAGTTCGGTCTGTATATCCAGATAGATCGATACGTCTAAATCAGAAAGACGCA	1401
QY	961	TTATCCATTCAAAATTTTGAACAACTCTGAAATGACAAACATTTTTCATATGCTTTATG	1020
Db	1402	TTATCCATTCAAAATTTTGAACAACTCTGAAATGACAAACATTTTTCATATGCTTTATG	1461
QY	1201	GGATGGGCTCTGAGTGTGTAAGGGCCATATATACCAATATCATATCTGATCTGAT	1080
Db	1462	GGATGGGCTCTGAGTGTGTAAGGGCCATATATACCAATATCATATCTGATCTGAT	1521
QY	1081	TCGGAACAGATTGTCTCTTCCATGATCTGAAATGCTTAAATTTAAAGCTTTGAT	1140
Db	1522	TCGGAACAGATTGTCTCTTCCATGATCTGAAATGCTTAAATTTAAAGCTTTGAT	1581
QY	1141	TTTTAAAGATGATGAAGTTTATATCAAGAGAGCAACTTGACAGAGAAATGATA	1200
Db	1582	TTTTAAAGATGATGAAGTTTATATCAAGAGAGCAACTTGACAGAGAAATGATA	1641
QY	1201	AAACATTTGAACGATGTGAACTCATATCATGAAATCCCTGATGCTCTCAGATATCA	1260
Db	1642	AAACATTTGAACGATGTGAACTCATATCATGAAATCCCTGATGCTCTCAGATATCA	1701
QY	1261	CCATTATTGATCTTATTAACCAATCAAAAGACGAGAAAGCAACTGATCAGCTTGA	1320
Db	1702	CCATTATTGATCTTATTAACCAATCAAAAGACGAGAAAGCAACTGATCAGCTTGA	1761
QY	1321	TCGCTGTGCTCTTAATCTTCCCTCCAGAAATATCAACTGAGAGATATGATCT	1380
Db	1762	TCGCTGTGCTCTTAATCTTCCCTCCAGAAATATCAACTGAGAGATATGATCT	1821
QY	1381	TCCTCGTTAAGATCTCCAAAGAAAAAGTTTAACTACGCGCTGTAAATTTCTACTGCAAT	1440
Db	1822	TCCTCGTTAAGATCTCCAAAGAAAAAGTTTAACTACGCGCTGTAAATTTCTACTGCAAT	1881
QY	1441	GCAGACACACAGCAACTGACGCTTCCAGACCCAGAAAGCATGGAATCTACCTCT	1500
Db	1882	GCAGACACACAGCAACTGACGCTTCCAGACCCAGAAAGCATGGAATCTACCTCT	1941
QY	1501	TCACGTCTTTATAAAAAGTGTATCGGCTAGCCTATCTCCGGCTTAATACACTTGTGAA	1560
Db	1942	TCACGTCTTTATAAAAAGTGTATCGGCTAGCCTATCTCCGGCTTAATACACTTGTGAA	2001
QY	1561	CGGCTCTGCTGACACCCAGAAATTAAGAACTATCATCTGAGACCTTTCCAGACACAC	1620
Db	2002	CGGCTCTGCTGACACCCAGAAATTAAGAACTATCATCTGAGACCTTTCCAGACACAC	2061
QY	1621	CTGAGAAATGAGTATGAACCTCATGAGAGACGCAATTTGGACCAATATGATGTGTC	1680
Db	2062	CTGAGAAATGAGTATGAACCTCATGAGAGACGCAATTTGGACCAATATGATGTGTC	2121
QY	1681	ATGTATGGCATATGGAAGTGGAAATATAGACCTTAATTCAAATCATTTGTAAACAGA	1740
Db	2122	ATGTATGGCATATGGAAGTGGAAATATAGACCTTAATTCAAATCATTTGTAAACAGA	2181
QY	1741	TACAAGATCTTCTCATGCTGTTCAAGAGACATTCAAAGCTGTTTGTATCAAGAGAG	1800
Db	2182	TACAAGATCTTCTCATGCTGTTCAAGAGACATTCAAAGCTGTTTGTATCAAGAGAG	2241
QY	1801	GAGATGATCTTATATATATATCTATTAAGTGGCTTCATGACGAGACTGAAGCAAT	1860
Db	2242	GAGATGATCTTATATATATATCTATTAAGTGGCTTCATGACGAGACTGAAGCAAT	2301
QY	1861	ATTTCAGATGCTTCCACACGAGCCCTACCTGTGCACCAATACCTCAGATCTCTGA	1920
Db	2302	ATTTCAGATGCTTCCACACGAGCCCTACCTGTGCACCAATACCTCAGATCTCTGA	2361
QY	1921	AGGCTTAAATTTCCATAGTCAACCTTACAGATATCTCGAAGGGAACATCTATATTC	1980
Db	2362	AGGCTTAAATTTCCATAGTCAACCTTACAGATATCTCGAAGGGAACATCTATATTC	2421
QY	1981	CCCTGGAAGTCAATATTAATTTTGAAGGTCTGGACACACCAACCAAAATGACTCA	2040

Db	2422	CCCTTAAAGATGCATATTAATAATTCGAAAGGCTGCCACACCAACAAATAATGACTCCA	2481
Qy	2041	AGATTCAGAAATTTTGTGTTCATTCGTGGATCATTCGAGACTTGTGAAAGTTCAGAA	2100
Db	2482	AGATTCAGAAATTTTGTGTTCATTCGTGGATCATTCGAGACTTGTGAAAGTTCAGAA	2541
Qy	2101	ATTAATTCAGATTCGTGTGTATACAGACGACCGTGTCTCAAAAAGTCTGTGAAGAACAC	2160
Db	2542	ATTAATTCAGATTCGTGTGTATACAGACGACCGTGTCTCAAAAAGTCTGTGAAGAACAC	2601
Qy	2161	CGCTCTTAACCCCTGAAATTAACCTTACCTTGTATGTAAGATTAAGATGAAGATGGA	2220
Db	2602	CGCTCTTAACCCCTGAAATTAACCTTACCTTGTATGTAAGATTAAGATGAAGATGGA	2661
Qy	2281	CGAATTCATCTCTCCAGGAGAGTCCCAATTTTCACGAGAAACTGGCAGAAATGACTTCTACT	2280
Db	2721	CGAATTCATCTCTCCAGGAGAGTCCCAATTTTCACGAGAAACTGGCAGAAATGACTTCTACT	2721
Qy	2722	CGAATTCATCTCTCCAGGAGAGTCCCAATTTTCACGAGAAACTGGCAGAAATGACTTCTACT	2781
Qy	2341	AAA 2343	
Db	2782	AAA 2784	
RESULT	2		
LOCUS	118496	3232 bp DNA	PAT
DEFINITION	Sequence 1 from patent US 5496731.		07-OCT-1996
ACCESSION	118496		
VERSION	118496.1	GI:1598831	
KEYWORDS			
SOURCE	Unknown.		
ORGANISM	Unknown.		
REFERENCE	1 (bases 1 to 3232)		
AUTHORS	Ku,H., Hu,S. and Benedict,W.F.		
TITLE	Broad-spectrum tumor suppressor genes, gene products and method for tumor suppressor gene therapy		
JOURNAL	Patent: US 5496731 A 1 03-MAR-1996;		
FEATURL	Location/Qualifiers		
	1..3232		
	1086 a 597 c 566 g 983 t		
BASE COUNT			
ORIGIN			

Query Match	Local Similarity	100.0%	Score 2343	DB 5	Length 3222
Best Local	Similarity	100.0%	Pred. No. 0		
Matches 2343	Conservative	0	Mismatches	0	Indels
				0	Gaps
					0
QY	1	ATGTCAAGACGTGTGAGAGATGATGATGATGTTGTGACCTTCGACCAATGTGAAG	60		
DB	124	ATGTCAAGACGTGTGAGAGATGATGATGATGTTGTGACCTTCGACCAATGTGAAG	153		
QY	61	ACATGTGACTATATATTGACACACCCAGCTTCGATCTCTGCAATAATCT	120		
DB	184	ACATGTGAACTTATATATTGACACACCCAGCTTCGATCTCTGCAATAATCT	243		
QY	121	GCATTGTGTCTAAAAGTTTCTTGATGACATTTTATTAGCTAAAGGGACGATATACAA	180		
DB	244	GCATTGTGTCTAAAAGTTTCTTGATGACATTTTATTAGCTAAAGGGACGATATACAA	303		
QY	181	ATGGAAGATGATGTGTGATTCATTTCACTTAATGCTATGTGTCTTGACATTTTATT	240		
DB	304	ATGGAAGATGATGTGTGATTCATTTCACTTAATGCTATGTGTCTTGACATTTTATT	363		
QY	241	AAACTCTACCTCCCATGTTGCTCAAGAAGCCATATAAAGACGTGTTTACCATTAT	300		
DB	364	AAACTCTACCTCCCATGTTGCTCAAGAAGCCATATAAAGACGTGTTTACCATTAT	423		

Qy	301	GGTTGACTCGAAGCACCAGGCGAGGTCAGCAAGCAGAGTGCAGAGATGCAAAACAACTA	360
Dd	424	GGTTCACCTGAGACCCAGGCGAGGTGAGAAACAGAGGTGCAGATGACAAACAACTA	483
Qy	361	GAAGATGATCAAGAGATTTATGAAAGTCTCTGTAAACAACATGATGTAATATGATGAG	420
Dd	484	GAATATGATCAAGATTTATGAAAGTCTCTGTAAAGATATGATATATGATGAG	543
Qy	421	GTGAAAAATGTTTATTTCAAAAATTTTATTAACCTTTTATGATTCCTCTTGACCTGTACAA	480
Dd	544	GTGAAAAATGTTTATTTCAAAAATTTTATTAACCTTTTATGATTCCTTGACCTGTACAA	603
Qy	481	TCTATAGACTTCCAGAGGTGAAAAATCTTTCTTAAAGATACAGAGAAATTTATCTTAAA	540
Dd	604	TCTATAGACTTCCAGAGGTGAAAAATCTTTCTTAAAGATACAGAGAAATTTATCTTAAA	663
Qy	541	AATTAAGTCTAGATGCAAGATTTTATTTGGATCTAGTGTAAACCTTCACACGATCTC	600
Dd	664	AATTAAGTCTAGATGCAAGATTTTATTTGGATCTAGTGTAAACCTTCACACGATCTC	723
Qy	601	AATGACGTTTTTAACACACACAGAACACCACGAAAAAGTAACTTGATGAGAGAGAT	660
Dd	724	AATGACGTTTTTAACACACAGAACACCACGAAAAAGTAACTTGATGAGAGAGAT	783
Qy	661	GTAAATCTCCACACACTCCACAGTATGAGACTGTTATGAAACATATCCAAATTTATGATG	720
Dd	784	GTAAATCTCCACACACTCCACAGTATGAGACTGTTATGAAACATATCCAAATTTATGATG	843
Qy	721	ATTTTAAATTCACAGAGATCAACCTTCAGAAAATGATGATTCCTATTTTAAACACTGC	780
Dd	844	ATTTTAAATTCACAGAGATCAACCTTCAGAAAATGATGATTCCTATTTTAAACACTGC	903
Qy	781	ACAGTGATCCAAAGAAAGATATACGTAAGAAAGATATGAGATATGATTTTAA	840
Dd	904	ACAGTGATCCAAAGAAAGATATATCTGTAAAGATATGAGATATGATTTTAA	963
Qy	841	GAGAAATTTGCTAAAGCTGTGTGGACAGAGGTGTGTGCAAAATTTGATCACACGATACAA	900
Dd	964	GAGAAATTTCTAAAGCTGTGTGGACAGAGGTGTGTGCAAAATTTGATCACACGATACAA	1023
Qy	901	CTTGGAGTGGCTTGTATTTACCGAGTATGGAATCATGCTTAAATCAGAAAGAACGA	960
Dd	1024	CTTGGAGTGGCTTGTATTTACCGAGTATGGAATCATGCTTAAATCAGAAAGAACGA	1083
Qy	961	TATTCATCTCAAAATTTATGAAACTCTGTAGTGCACAACTTTTCATATCTCTTATG	1020
Dd	1084	TATTCATCTCAAAATTTATGAAACTCTGTAGTGCACAACTTTTCATATCTCTTATG	1143
Qy	1021	GGTGGCGCTGTAGGTTGTATAGGCGCAATATATAGAGATGACATCTCAAACTTGAT	1080
Dd	1144	GGTGGCGCTGTAGGTTGTATAGGCGCAATATATAGAGATGACATCTCAAACTTGAT	1203
Qy	1081	TCTGGAACAATTTGTCTTCCATGAGATTCGAAATGCTTAATTTAAAGCCTTGTAT	1140
Dd	1204	TCTGGAACAATTTGTCTTCCATGAGATTCGAAATGCTTAATTTAAAGCCTTGTAT	1263
Qy	1141	TTTTTCAAAAGTATCGAAGGTTTATCTCAAGACAGAGCAACTGACAAAGAAATGATA	1200
Dd	1264	TTTTTCAAAAGTATCGAAGGTTTATCTCAAGACAGAGCAACTGACAAAGAAATGATA	1323
Qy	1201	AAGCATTTAGAGAGATGGAACATCGAAATCATGGAATCCCTGCAAGGCTCTCGATTCA	1260
Dd	1324	AAGCATTTAGAGAGATGGAACATCGAAATCATGGAATCCCTGCAAGGCTCTCGATTCA	1383
Qy	1261	CCTTATATGATCTTTATTAACAATCAAGAGACGAGAAAGCAATGATGATCTTGA	1320
Dd	1384	CCTTATATGATCTTTATTAACAATCAAGAGACGAGAAAGCAATGATGATCTTGA	1443
Qy	1321	TCTGCTGTCTCTTTATCTCTCTCTCCAGAAATATCACTCCACAGATATGATCTT	1380
Dd	1444	TCTGCTGTCTCTTTATCTCTCTCTCCAGAAATATCACTCCACAGATATGATCTT	1503

QY 1381 TCTCTGTAGATCTCCAAAGAAAAAGTTCAACTACCGCTGTAAATCTACTGCMAAT 1440
DB 1504 TCTCCCTGTAGATCTCCAAAGAAAAAGTTCAACTACCGCTGTAAATCTACTGCMAAT 1563
QY 1441 GCAGAGACCAAGCAACCTCAGCTTCAGACAGAAAGCCATTGAATCTACTCTCTT 1500
DB 1564 GCAGAGACCAAGCAACCTCAGCTTCAGACAGAAAGCCATTGAATCTACTCTCTT 1623
QY 1501 TCACGTTTAAATAAAAAGTATACGCTACCTATCTCCGCTAAATCTACTCTCTTGA 1560
DB 1624 TCACGTTTAAATAAAAAGTATACGCTACCTATCTCCGCTAAATCTACTCTCTTGA 1683
QY 1561 CGCTCTCTGTCTGAGCACCAGCAATTAACATATCATCTGACCCCTTTCCAGCACACC 1620
DB 1684 CGCTCTCTGTCTGAGCACCAGCAATTAACATATCATCTGACCCCTTTCCAGCACACC 1743
QY 1621 CTGCAAGATGAGTATGAACTCATGAGAGACAGGCAATTTGACCAAAATTTATGATGTCTC 1680
DB 1744 CTGCAAGATGAGTATGAACTCATGAGAGACAGGCAATTTGACCAAAATTTATGATGTCTC 1803
QY 1741 TACAGAGATCTCTCCTCATGCTTCAGAGACATTCACAGCTTTGATCAAGAAAG 1800
DB 1864 TACAGAGATCTCTCCTCATGCTTCAGAGACATTCACAGCTTTGATCAAGAAAG 1923
QY 1801 GAGTATGATCTAT 1860
DB 1924 GAGTATGATCTAT 1983
QY 1861 ATTTGCAATATGCTTCACACAGGCCCCCTACCTGTGCACCAATACCTCATTTCTCTCA 1920
DB 1984 ATTTGCAATATGCTTCACACAGGCCCCCTACCTGTGCACCAATACCTCATTTCTCTCA 2043
QY 1921 AGCCCTCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 1980
DB 2044 AGCCCTCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2103
QY 1981 CCGCTCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2040
DB 2104 CCGCTCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2163
QY 2041 AGATCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2100
DB 2164 AGATCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2223
QY 2161 ATTAATCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2160
DB 2284 ATTAATCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2283
QY 2161 CCGCTCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2220
DB 2284 CCGCTCAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2343
QY 2221 AGTAAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2280
DB 2344 AGTAAAGATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2403
QY 2281 CGAAGACATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2340
DB 2404 CGAAGACATTTCTCACTACCTACCTAGGATTTCTGAGAGGAAACATCTATTTCA 2463
QY 2341 AAA 2343
DB 2464 AAA 2466

ACCESSION 118497
VERSION 118497.1 GI:1598852
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 3232)
AUTHORS Xu, H., Hu, S. and Benedict, W. F.
TITLE Broad-spectrum tumor suppressor genes, gene products and methods
for tumor suppressor gene therapy
JOURNAL Patent: US 5496731 A 2 05 -MAR-1996;
FEATURES
source Location/Qualifiers
BASE COUNT 983 a 566 c 597 g 1086 t
ORIGIN
Query Match 100.0%; Score 2343; DB 5; Length 3232;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2343; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
QY 1 ATGTCAAGCTGTGAAGAGTATGATATGTTGTCAGCTTCACCAATGGAAGG 60
DB 3113 ATGTCAAGCTGTGAAGAGTATGATATGTTGTCAGCTTCACCAATGGAAGG 3054
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DB 3053 ACATGTGAAGCTAT 2994
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QY 301 GGTTCACCTGCAACACCGAGGCGAGGTGCAAGACAGAGTGCAGGATAGCAAAACATTA 360
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DB 2513 ATAGACAGTTTGAAGACAGAGAACACGAGAAAGTAACTTGTATGAGAGGTGAT 2454
QY 661 GTAATTCCTGACAGACAGCTAGTATGAGTATGAGTATGAGTATGAGTATGAGTATGAGTAT 720
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151 ProPheMetSerSerLeuGlyLeuValThrSerAsnGlyLeuProLuva 167
892 CCTTTATGATATCTCTGGACTGTGACATCTTAATGAGACTTCCAGAGGT 941
167 LgluAsnLeuSerLysArgTyrGluGluIleTyrLeuLysAsnLysAspL 184
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184 euAspAlaArgLeuPheLeuAspHisAspLysThrLeuGlnThrAspSer 200
992 TAGATCCAGATATTTTGGATCATGATAAAACTCTCAGACTGATCT 1041
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1042 ATGACACAGTTTGAACACGAGAACACACGAAAAAGTAACCTTGATGA 1091
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1142 CTATCCACAAATTAATGATGATTTAAATTCAGCAAGTGCATCACTTCA 1191
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334 LephHisMetSerLeuLeuAlaCysAlaLeuGluValMetAlaThr 350
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351 TyrSerArgSerThrSerGlnAsnLeuAspSerGlyThrAspLeuSerP 367
1492 TATACAGAGATACATCTCAGATCTTGAATCTTGAAACAGATTTGCTTT 1541
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DEFINITION Sequence 1 from patent US 5496731.

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VERSION      I18496.1  GT:1598851
KEYWORDS

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KEYWORDS

UNKNOWN.

UNCLASSIFIED.

UNCLASSIFIED:
1 (bases 1 to 3232)
REFERENCE

AUTHORS
Xu, H., Hu, S. and Benedict, W.F.

TITLE	Abstract	Indexing	Comments
Broad-spectrum tumor suppressor genes, gene products and methods			

for tumor suppressor gene therapy

JOURNAL Patent: US 5496731-A 1 05-MAR-1996

FEATURES

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LOCUS 118497
DEFINITION Sequence 2 from patent US 5496731.
ACCESSION 118497
VERSION 118497.1 GI:1598852
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 3232)
AUTHORS Xu,H., Hu,S. and Benedict,W.F.
TITLE Broad-spectrum tumor suppressor genes, gene products and methods
for tumor suppressor gene therapy
Patent: US 5496731-A 2 05-MAR-1996;
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DEFINITION M33647 J02994

ACCESSION M33647.1 GI:190945

VERSION retinoblastoma protein.

KEYWORDS Homo sapiens (clone: p4.7R) cDNA to mRNA.

SOURCE Homo sapiens

ORGANISM Homo sapiens

REFERENCE Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo. 1 (bases 1 to 4600)

AUTHORS Friend, S.H., Horowitz, J.M., Gerber, M.R., Wang, X.F., Bogenmann, E., Li, F.P. and Weinberg, R.A.

TITLE Deletions of a DNA sequence in retinoblastomas and mesenchymal tumors: organization of the sequence and its encoded protein [published erratum appears in Proc Natl Acad Sci U S A 1988 Apr;85(7):2234]

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 84 (24), 9059-9063 (1987)

MEDLINE 88097427

COMMENT Draft entry and computer-readable copy of sequence for [1] kindly provided by S.H.Friend, 10-FEB-1988.

FEATURES

SOURCE

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VERSION 105311.1
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ORGANISM Unknown.
REFERENCE 1 (bases 1 to 4597)
AUTHORS Dryja, T. and Friend, S.
TITLE Human DNA: A 4597bp analysis of retinoblastoma
JOURNAL Patent: EP 0259031-A1 09-MAR-1988.
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ACCESSION M33647.1 GI:190945
VERSION M33647.1 GI:190945
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SOURCE Homo sapiens (clone: p4.7R) cDNA to mRNA.
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia;
Eutheria; Primates; Catarrhini; Homnidae; Homo.
REFERENCE 1 (bases 1 to 4600)
AUTHORS Friend,S.H., Horowitz,J.M., Gerber,M.R., Wang,X.F., Bogenmann,E.,
Ll,F.P. and Weinberg,R.A.
TITLE Deletions of a DNA sequence in retinoblastomas and mesenchymal
tumors: organization of the sequence and its encoded protein
[Published erratum appears in Proc Natl Acad Sci U S A 1988
Apr;85(7):2234]
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 84 (24), 9059-9063 (1987)
MEDLINE 88091427
COMMENT Draft entry and computer-readable copy of sequence for [1] kindly
provided by S.H.Friend, 10-FEB-1988.
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REFERENCE	Lee, W.H., Shew, J.Y., Hong, F.D., Sery, T.W., Donoso, L.A., Young, L.J., et al. (1994)	
AUTHORS	Bookstein, R. and Lee, F.Y.	
TITLE	The retinoblastoma susceptibility gene encodes a nuclear phosphoprotein associated with DNA binding activity	
JOURNAL	Nature 329 (6140), 642-645 (1987)	
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Align seg 1/1 to: HUMRBSA from: 1 to: 2994

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      241 CAGGACAGACGGCCCCGGAGGACCTGCTCTGCTGAGCCTTGATTTGAGA 290
      18 uThrGlnLupProAspPheThrAlaLeuGlnLysLeuLysIleProA 35
      291 AACACAAACACCTGATTTTACTGCTATTATGTCCAGAAATTAAGATACCG 340
      35 sPHisValArgLuarGalatRpeuThrTyrP6LysValSerSerVal 51
      341 ATCATGCTAGAGAGAGAGCTGTGTTACTGTGGAGAAAGTTTCACTCTGTG 390
      52 AspGlyValLeuGlyGlyTyrIleGlnLysLysGluLeuTyrGlyT 68
      391 GATGGAGATTTGGAGAGGTATATTCAAAAGAAAAAGAACTGTGGGGAA 440
      68 eCysIlePheIleAlaIaValAspLeuAspGluMetSerPheThrPhe 85
      441 CTGATCTTTATTGACAGAGTTGACCTAGCATGAGATGCTTCACCTTTA 490
      85 hGlnLeuGlnLysAsnIleGluIleSerValHisLysPheAsnLeu 101
      491 CTGAGCTTCAGAAAAACATAGAAATCAGTCCATTAATCTTTACTTA 540
      102 LeuLysGlnIleAspThrSerThrLysValAspAsnAlaMetSerArgLe 118
      541 CTAAAGAAATTTGATACCGATACCAAGTTGATTAATGCTATCTCAGACT 590
      118 uLeuLysLysTyrAspValLeuPheAlaLeuPheSerLysLeuGluArg 135
      591 GTTGAGAGAGTATGATGATGTTGTCACCTTCACCAATATGGAAAGA 640
      135 hnCysGluLeuLysLeuThrGlnProSerSerSerIleSerhGln 151
      641 CATGGAAGCTATATATTGACACAAACCCAGAGTTCGATATCTCTCAA 690
      152 IleAsnSerAlaLeuValLeuLysValSerTyrIleThrPheLeuLeuAl 168
      691 ATAAATTTCTGCAATGTGCTGCTAAAGTTCTTGATCTACCTTTTATTAG 740
      168 aLysGlyGluValLeuGlnMetGluAspAspLeuValIleSerPheGlnI 185
      741 TAAAGGAGAGTATTACAAATGGAGATGATCGTGATTCATTCTAGT 790
      185 eLMetLeuCysValLeuAspTyrPheIleLysLeuSerProProMetLeu 201
      791 TAAATCTATGTCCTTGACTATTTTATTAACTCTCAGCTCCCATGTG 840
      202 LeuLysGluProTyrLysThrAlaValIleProIleAsnGlySerProAr 218
      841 CTCAAGAACCATATAAACAGCGTATATACCATTAATGCTTCACTCG 890
      218 gThrProArgArgGlyGlnAsnArgSerAlaArgIleAlaLysGlnLeuG 235
      891 AACACCCAGCGGAGGTCAAGACAGAGGTGCGGATAGCAAAACACACAG 940
      235 LuAsnAspThrArgIleIleGluValLeuCysLysGluIleGlnLysAsn 251

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202 LeuylsgluProtyrLysThrAlaValIleProIleasnGlySerProAr 218
|||||
706 CTCAAAGAACCATATTAACAGCTGATATACCATTAATGTTACACTCG 755
218 gThrProArgrglGlylnasnArgrAlaArgIleAlaLysGlnLeug 235
|||||
756 AACACCCGCGAGTCAGAAACAGAGTGCACGATAGCAAAACAACCTAG 805
235 luasnAspThrArgIleIleGluValLeuGlySylsGlnHisGluCysAsn 251
|||||
806 AAATGATACAAAGATATATGAAGTCTCTGTAAGACATGATCTAT 855
252 lIleAspGluValLysAsnValTyrPheLysAsnPheIleProPheMetS 268
|||||
856 ATGATGAGGTGAAAAATGTTATTTCAAAAATTTATACCTTTATGAA 905
268 nSerLeuGlyLeuValThrSerAsnGlyLeuProGluValGluAsnLeus 285
|||||
906 TTCCTGTGACTGTGAACATCTAATGAGCTTCAGAGGTGAAAACTTT 955
5 eTyrArgTyrGluGluIleTyrLeuLysAsnLysAspLeuAspAlaArg 301
|||||
906 CTAAACGATACGAAGAAATTTATCTTAAAAATTAAGATCTAGTCAAGA 1005
302 LeupheLeuAspHisAspLysThrLeuGlnThrAspSerIleAspSerPh 318
|||||
1006 TTATTTTGGATCATGATAAAACTCTCAGACATCTATAGACAGTTT 1055
318 eGluThrGlnArgrThrProArgrLysSerAsnLeuAspGluGluValAsnV 335
|||||
1056 TCAAAACACAGAGAACCCAGCAAAAAGTAACTTGATGAAAGAGTGAATG 1105
335 aIleProArgrHisThrProValArgrThrValMetCAsnThrIleGlnGln 351
|||||
1106 TAAATCCCTCCACACCTCCAGTCTGATGAGACTGTATGAACATACCAACA 1155
352 LeuMetCetiLeuAsnSerAlaSerAspGlnProSerGluAsnLeu 368
|||||
1156 TTAAATGATGATTTAAATTCAGCAAGTATCAACTCAGAAAAATCTGAT 1205
368 eSerTyrPheAsnAsnCysThrValAsnProLysGluSerIleLeuLysA 385
|||||
1206 TTCCTATTTTAAACAACCTGCACAGTAATCCAAAAAGAAATATCTAAAA 1255
385 rGValLysAspIleGlyTyrIlePheLysGluLysPheAlaLysAlaVal 401
|||||
1256 GAGTGAAGATATAGGATACATCTTTAAAGAAATTTGCTAAAGCTGTG 1305
302 GlyGlnGlyCysValGluIleGlySerGlnArgrTyrLysLeuGlyValAr 418
|||||
306 GGACAGGGTGTGTGCAATTTGATTCACAGCGATACAACTTGAGACTTG 1355
418 gLeuTyrTyrArgValMetGluSerMetLeuLysSerGluGluGluArgL 435
|||||
1356 CTTGATATACCGAGTAATGATCATCTTAATCAGAAAGAAAGACGAT 1405
435 euSerIleGlnAsnPheSerLysLeuLysAsnAspAsnIlePheHisMet 451
|||||
1406 TATCATTCAAAATTTTACAAACTTCTGAAATGACAAACATTTTTCATATG 1455
452 SerLeuLeuAlaCysAlaLeuGluValValMetAlaThrTyrSerArgSe 468
|||||
1456 TCTTATATGGCGTGGCTCTGAGGTGTATAGCCCATATAGCGAAG 1505
468 rThrSerGlnAsnLeuAspSerGlyThrAspLeuSerPheProTyrIleL 485
|||||
1506 TACATCTCAGAACTTGATCTTGGAACAGATTTGCTTCCATGATATC 1555
485 euAsnValLeuAsnLeuLysAlaPheAspPheTyrLysValIleGluSer 501
|||||
1556 TGAATGTCTTAATTTAAAGCCTTGATTTTACAAAGGATGGAAGT 1605
502 PheIleLysAlaGluGlyAsnLeuThrArgGluMetIleLysHisLeuG 518

|||||
1606 TTTATCAAGCAGAGCAACTGTACAGAGAAATGATTAACATTAGA 1655
518 uArgrGluHisArgIleMetGluSerLeuAlaTyrLeuSerAspSerP 535
|||||
1656 ACGATGTACATCGAATCATGGAATCCCTGATGATGCTCAGATTCAC 1705
535 rLeuPheAspLeuIleLysGlnSerLysAspArgGluGlyProThrAsp 551
|||||
1706 CTTTATTTGATCTTATTAACAATCAAGAGCAGCAGAGACCACTGAT 1755
552 HisLeuGluSerAlaCysProLeuAsnLeuProLeuGlnAsnAsnHisTh 568
|||||
1756 CACCTGAAATCTGCTGTCCCTTAATCTTCTCCAGATATACACAC 1805
568 rAlaAlaAspMetTyrLeuSerProValArgrSerProLysLysGlyS 585
|||||
1806 TGCACAGATATATGATCTTCTCCTGTAGATCTCCAAAGAAAAAGTT 1855
585 eThrThrArgValAsnSerThrAlaAsnAlaGluThrGlnAlaThrSer 601
|||||
1856 CACTACAGCGGTAAATCTACTGCAATGCAAGACACAGACCACTCA 1905
602 AlaPheGlnThrGlnLysProLeuLysSerThrSerLeuSerLeuPheT 618
|||||
1906 GCCTTCAGACCCAGAGAGCCATTAATCTACCTCTTCACTGCTTTTA 1955
618 rLysLysValTyrArgLeuAlaTyrLeuArgrLeuAsnThrLeuCysGluA 635
|||||
1956 TAAAAAGTATCGGCTACGCTATCCCGCTAAATACACTTGTGAGAC 2005
635 rGluLeuSerGluHisProGluLeuGluHisIleIleTyrPheLeuPhe 651
|||||
2006 GCCTTGTGTGAGCAGCCAGAAATTAACAATCATCTGAGACCTTTTC 2055
652 GlnHisThrLeuGlnAsnGluTyrGluLeuMetArgAspArgHisLeuAs 668
|||||
2056 CAGCACACCTCGAGAAATGATGAACTCATGAGACAGGACATTGGA 2105
668 pGlnIleMetMetCysSerMetTyrGlyIleCysLysValLysAsnIleA 685
|||||
2106 CCAATATGATGCTTCCATGATGATGATGATGATGATGATGATGATG 2155
685 sPheLysPheLysIleIleValThrAlaTyrLysAspLeuProHisAla 701
|||||
2156 ACCTTAATCAAAATCATTTGTACACAGCATCAAGAGATCTTCTCATGCT 2205
702 ValGlnGluThrPheLysArgValLeuIleLysGluGluGluTyrAspSe 718
|||||
2206 GTTCAGAGACATTCAAAACGTGTTGATCAAAAGAGAGAGATCATTC 2255
718 rIleIleValPheTyrAsnSerValPheMetGlnArgLeuLysThrAsnI 735
|||||
2256 TATATAGATTTCTAATCTGTGCTTATGACAGAGCTGAAGAAACAAATA 2305
735 lLeuGlnTyrAlaSerThrArgrProThrLeuSerProIleProHis 751
|||||
2306 TTTTGAGATATCTTCCACAGGCCCCCTTACCTGTACCAATATCTCAC 2355
752 lIleProArgrSerProTyrLysPheProSerSerProLeuArgrIleProI 768
|||||
2356 ATTCCTCGAAGCCTTACAAAGTTCTTACCTTACCTTACGATTTCTTG 2405
768 yGlyAsnIleTyrIleSerProLeuLysSerProTyrLysIleSerGluG 785
|||||
2406 AGGAAACATCTATTTACCCCTGAAGAGTCCATATAAATTTTCAGAG 2455
785 lYleuProThrProThrLysMetThrProArgrSerArgIleLeuValSer 801
|||||
2456 GTCTGCAACACCAACAAAATGATCCAGATCAAGAAATCTTATGATTA 2505
802 lIleGlyLysSerPheGlyThrSerGluLysPheGlnLysIleAsnGlnMe 818
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